

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-18-108
Relating to Certification of New Motor Vehicles

VOLVO CAR CORPORATION

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below:

Model Year: 2001

Vehicle Type: Passenger Car

Exhaust Emission Standard Category: Ultra-Low-Emission Vehicle (ULEV)

Fuel Type: Gasoline

Test Group: 1VVXV2.43U5N

Engine Displacement: 2.4 Liters

Evaporative Family: 1VVXR0133AAA

Special Features and Exhaust Emission Control Systems:

Sequential Multiport Fuel Injection
Three Way Catalytic Converter
Heated Oxygen Sensors (two)

Models Covered: Volvo S60, Volvo V70

The exhaust certification emission levels and standards, in grams per mile, of non-methane organic gases (NMOG) or non-methane hydrocarbons (NMHC), carbon monoxide (CO), oxides of nitrogen (NOx), and formaldehyde (HCHO) for the listed vehicle models are as follows. The exhaust certification emission levels and standards under the Supplemental Federal Test Procedure (SFTP) US06 and SC03 tests are also listed below. The NMOG exhaust certification emission levels include application of the reactivity adjustment factor (RAF) as specified.

The evaporative hydrocarbon (HC) certification emission levels and standards for three-day diurnal plus hot soak (3D) and two-day diurnal plus hot soak (2D) in grams per test, running loss (RL) in grams per mile, and onboard refueling vapor recovery (ORVR) in grams per gallon of fuel dispensed, for the listed vehicle models are as follows.

<u>Type of Emissions</u>	<u>Miles</u>	<u>Certification Level</u>	<u>Certification Standards</u>
<u>EXHAUST @ NMOG RAF = 0.94</u>			
..... NMOG fleet average		0.075 (projected)	0.070
NMOG	50,000	0.028	0.040
NMOG	100,000	0.032	0.055
CO	50,000	0.4	1.7
CO	100,000	0.6	2.1
NOx	50,000	0.1	0.2
NOx	100,000	0.2	0.3
NOx (highway)	50,000	0.04	0.3
NOx (highway)	100,000	0.1	0.4
HCHO	50,000	0.0003	0.008
..... HCHO	100,000	0.0005	0.011
..... CO (20°F)	50,000	5.7	10.0
NMOG (50°F)	4,000	0.067	0.080
CO (50°F)	4,000	0.5	1.7
NOx (50°F)	4,000	0.1	0.2
HCHO (50°F)	4,000	0.0005	0.016
NMHC+NOx (SFTP US06)	4,000	0.04	0.14
CO (SFTP US06)	4,000	0.4	8.0
NMHC+NOx (SFTP SC03)	4,000	0.10	0.20
CO (SFTP SC03)	4,000	0.2	2.7
<u>EVAPORATIVE</u>			
HC-2D	100,000	1.8	2.5
HC-3D	100,000	0.9	2.0
HC-RL	100,000	0.00	0.05
HC-ORVR	100,000	0.001	0.20

BE IT FURTHER RESOLVED: That any debit in the manufacturer's NMOG fleet average compliance plan shall be equalized as required by the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

BE IT FURTHER RESOLVED: That the listed vehicle models comply with and are conditionally certified to the "Malfunction and Diagnostic System Requirements—1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned model year. This certification is contingent upon the manufacturer providing all the on-board diagnostic demonstration data required by Title 13, California Code of Regulations, Section 1968.1(g) by October 1, 2000. Failure to submit the required demonstration data by the specified date, or failure of the submitted demonstration data to show compliance with the test procedures, shall be cause for the Air Resources Board to revoke this Executive Order and vehicles sold under the revoked conditional certification shall be deemed uncertified.

BE IT FURTHER RESOLVED: That for the listed vehicle models, the manufacturer has attested to compliance with the following California emission regulations and requirements. Vehicles certified under this Executive Order shall conform to all applicable California emission regulations and requirements.

- Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks (Title 13, California Code of Regulations, Section 2235)
- Motor Vehicle Emission Control and Smog Index Label Specifications (Title 13, California Code of Regulations, Section 1965)
- Emission Control System Warranty (Title 13, California Code of Regulations, Sections 2035 et seq.)
- High-Altitude Requirements and California Inspection and Maintenance Emission Standards (California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles)

The Bureau of Automotive Repair will be notified by copy of this order.

Executed at El Monte, California this 25th day of September 2000.



R. B. Summerfield, Chief
Mobile Source Operations Division